Owner's Manual

for Assembly, Operating & Maintenance of

Model Big 60 II Gas Utility Stove



www.bigjohngrills.com



YOU MUST READ THIS OWNER'S MANUAL BEFORE OPERATING YOUR GAS APPLIANCE.

DANGER

IF YOU SMELL GAS:

- 1. SHUT OFF GAS TO APPLIANCE
- 2. EXTINGUISH OPEN FLAMES
- 3. OPEN LID (IF APPLICABLE)
- 4. IF ODOR CONTINUES, KEEP AWAY FROM THE APPLIANCE AND IMMEDIATELY CALL YOUR GAS SUPPLIER OR FIRE DEPARTMENT.

LEAKING GAS MAY CAUSE FIRE, EXPLOSION, PERSONAL INJURY, DAMAGE TO PROPERTY, AND DEATH.

WARNING: Follow all leak-check procedures listed in this manual carefully prior to operation of this unit. Do this even if the unit was assembled by a professional.

WARNING: Do not ignite this utility stove without reading the LIGHTING INSTRUCTIONS first.

WARNING: DO NOT store or use gasoline or other flammable liquids/vapors in the vicinity of this utility stove.

An LP Cylinder not connected for use should not be stored in the vicinity of this unit.

THIS GAS UTILITY STOVE IS DESIGNED FOR OUTDOOR USE ONLY.

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PROPANE SAFETY - GENERAL

- Liquid propane (LP) gas is a petroleum product as are gasoline and natural gas. In normal temperatures and pressures, LP gas is a gas. When moderate pressure is applied, inside a cylinder, LP gas becomes a liquid. As the pressure is released the liquid readily vaporizes and boils off as a gas.
- LP gas has no odor, but rather an odor additive so you can smell it.
- Propane gas is denser than air, if a propane tank purges to relieve pressure build-up, the propane
 will collect in low lying areas. These areas can be easily ignited and are highly flammable. Use
 caution when dealing with a propane tank that may have recently self-purged.
- DO NOT paint propane tanks any color other than white. Any alteration to tank color will result in tank purging, fire, personal injury, or death.
- Big John Grills & Rotisseries uses high quality Worthington Cylinders in 30 lb. and 40 lb. sizes. These tanks are protected with a rust-resistant white powder coat finish.
- Always keep the cylinder valve closed when not in use.
- Cylinders are designed to function with the valve completely open or completely closed, there is no in-between. Never open the valve just a "crack" or "half way".
- Always position the propane cylinder so that the connection between the valve and the regulator will
 not cause any sharp bends in the hose.
- NEVER store or use propane cylinders indoors.
- Make sure the POL or QCC Connector is free from scratches or nicks which can cause gas leaks.
- DO NOT store or use gasoline or other flammable liquids or vapors in the vicinity of a gas appliance.
- DO NOT store extra liquid propane cylinders within the vicinity of a gas appliance.
- DO NOT store a liquid propane cylinder in/on any part of an appliance not intended for such use. Improper storage of a cylinder could lead an explosion, fire, personal injury, or death.
- DO NOT store or lean items against unit surface or fuel cylinders while operating.
- Shut off unit and all gas sources if the odor of unburned gas is detected. Make no attempt to use the unit until gas leaks are fixed and/or the odor is accounted for.
- Do NOT use a damaged, dented, or rusty LP cylinder or a cylinder with a damaged valve replace with a new one immediately.
- Replacement LP tanks must match the regulator connection supplied with this grill and be a minimum of 30 lb. capacity.

LIQUID PROPANE TANK REQUIREMENTS

- For tanks not purchased from Big John Grills & Rotisseries: check to be sure cylinders have been tested within the past 5 years and have a D.O.T. certification. Your LP gas supplier can do this for you.
- All LP tank supply systems must have a collar to protect the cylinder valve.
- All tanks used on Big John Grills equipment must be a minimum of 30 lb. size.
- Tanks larger than 100 lbs. in size may require a POL for connection. Please call a Big John Customer Service Representative if you are using a 100 lb. propane tank.

PROPANE SAFETY - CYLINDER

DISCONNECTING AND TRANSPORTING PROPANE CYLINDERS FOR REFILLING

- Turn off all control knobs and close the main cylinder valve. Disconnect regulator with QCC.
- Place cylinder valve plug snugly in the main cylinder valve outlet. Only use the cylinder valve plug that is provided with the cylinder. Other types of caps or plugs may result in leakage of propane.
- Treat "empty" LP cylinders with the same care as full ones. Even when the tank is empty, there is still some gas pressure left in the cylinder.
- Always transport and store propane cylinders in a secure, upright position. Never store these
 propane tanks on their side, handle them roughly, or drop them.
- Never keep propane cylinders (full or empty) in a hot vehicle. Heat can cause the relief valve to purge propane creating a very dangerous situation.
- To fill, take the LP cylinder to a propane gas dealer WARNING: We strongly recommend that your LP cylinder be filled by an authorized propane dealer, by a qualified attendant, who fills the tank by weight. IMPROPER FILLING IS DANGEROUS.
- Air must be purged from a new LP cylinder before the initial filling. Your LP dealer will do this.

STORING PROPANE CYLINDERS

- Turn off all control knobs and close the main cylinder valve.
- Place cylinder valve plug or cap snugly in main cylinder valve outlet.
- Always store propane cylinders in a secure, cool/dry place in the upright position.
- Never store propane cylinders in a vehicle of any kind and or anywhere the temperatures can reach 125° F.

PROPANE SAFETY - CYLINDER

CONNECTING A FILLED 30 LB. CYLINDER

- Remove the main cylinder plug.
- Make sure that all gas valves on the Utility Stove are in the "OFF" position.
- Thread the QCC Connector or POL Connection snugly into main cylinder.
- ALWAYS check for leaks. Apply soapy water with a brush or spray bottle to areas where the QCC (or POL) screw into tank, where the QCC (or POL) attach to regulator, where the hose screws into the regulator, and where the hose screws into the appliance.
- Open the cylinder valve and watch for bubbles.
- If bubbles appear, tighten the connections further. If this does not remedy the problem, call your propane dealer.
- If the system is free of leaks, light the burners and proceed to cook.
- In the event of a QCC failure, your grill will not light or stay lit, see page 15 for troubleshooting.

If you suspect any problems, have your unit and tank serviced by a qualified professional.



PROPANE SAFETY - QCC

HOW A QCC VALVE WORKS

There is a safety check valve inside our bright green QCC-1 fitting. Once the regulator is connected to the propane tank and the main cylinder is "OPEN", a minimal amount of gas is allowed to flow through the check valve. If there are no downstream leaks, the pressure on both sides of the check valve will equalize and the spring loaded stopper will open allowing maximum gas to flow. This only takes a few seconds to complete and then you can start the lighting procedure.

IF THE QCC INDICATES FAILURE

If there is a downstream leak, or if you have started with a control valve "OPEN", the pressure will not equalize on both sides of the QCC check valve and it will fail. The only gas flow you will have is a small amount that is designed to flow around the check-valve, the equivalent of 5,000 BTU's. This may allow you to light part of the burner or you may experience a blow out. In case of a QCC failure, follow the procedure below:

TO TROUBLESHOOT THE PROBLEM

CHECK:

- 1. Check that all of the control valves are in the "CLOSED" position.
- 2. Check that you are using at least a 30# propane tank
- 3. Check that the QCC is lime green black or dark green will cause lighting problems. If everything is correct, reset the system.

SOLUTION:

<u>To reset:</u> Close all of the control valves on the utility stove & close propane tank valve. Then start the lighting procedure from the beginning. If the problem persists, Check for Leaks:

If you experience a QCC Failure, first check your system for leaks:

- 1. Turn off all control valves and turn off propane tank
- 2. Extinguish any remaining open flames
- 3. Let gas dissipate until odor is no longer detected
- 4. Make sure all control valves are closed and gas tank valve is off
- 5. In a spray bottle, mix together dish soap and water
- 6. Spray the following with soapy water mixture
 - a. Tank Valve to QCC (part that screws into tank from regulator)
 - b. QCC to Regulator
 - c. Regulator to Hose
 - d. Entire hose
 - e. Hose to Grill
 - f. Each Control Valve where it Connects to Manifold
 - g. Manifold end cap (opposite side from hose connection)
- 7. Turn on propane tank
- 8. Inspect each connection and length of hose for any bubbles being produced
- 9. If bubbles are detected (bubbles indicate gas is escaping), turn off propane tank and call Big John Grills to order replacement parts. Do not go to your local hardware store.
- 10. If no bubbles are detected, check to see if propane tank is empty.
- 11. If tank is not empty, please call Big John Grills for further assistance

If you need assistance at any time please call Big John's Customer Service at 1-800-326-9575 or 814-359-2755

GENERAL INFORMATION

Thank you for purchasing a Big John Big 60 Utility Stove! We take pride in producing and selling equipment made right here in America and are pleased that you recognized the quality and durability of our products. Your new utility stove is a commercial grade, outdoor piece of cooking equipment. With this unit, you will be able to sauté, steam, fry, boil, or simmer. Due to exceptional portability, Big John Utility Stoves are preferred by professional chefs and caterers for cooking at offsite catering events & festivals, restaurants, hotels & resorts, golf courses, and personal homes. Please read the information provided below before using your grill for the first time.

- Big John products are designed for OUTDOOR USE ONLY! Only operate this equipment in a well-ventilated area. Do not use in garage, building, or other enclosed area. Operation of this equipment indoors or in a poorly ventilated area may cause an explosion, fire, personal injury, or death.
- ONLY use the hose and regulator supplied with this utility stove from the manufacturer. Any attempt to use parts found in a hardware store may result in the not functioning properly which could lead to an explosion, fire, personal injury, or death.
- DO NOT retrofit any equipment or accessories to the unit that are not part of the original equipment provided by Big John Grills & Rotisseries. Replacement parts must be obtained from the manufacturer. Any attempt to change or modify this unit could result in an explosion, fire, personal injury to yourself or someone else, or death and will void your warranty.
- DO NOT touch or allow any contact with the sides, back, or top of unit after lighting. The unit is EXTREMELY HOT! Allow the utility stove to cool completely before touching any metal surface.
- DO NOT operate utility stove within 12" of a combustible or non-combustible surface. Provide adequate clearance and ventilation at all times.
- WARNING! Use of this utility stove in high wind conditions may result in poor burner operation (low flame, blowing out, flaring up, etc.). Avoid these conditions if possible by repositioning the unit. If repositioning does not improve operation, discontinue use and turn off unit until conditions improve.
- DO NOT perform any maintenance until utility stove is completely cooled down.

ASSEMBLY INSTRUCTIONS

This unit ships 90% assembled and we make sure the instructions for the rest are easy to follow and perform. Please follow the instructions below to ensure your unit is properly assembled for safe operation. Please remember this is a commercial piece of equipment and therefore the materials used to build it are of the best quality.

- 1. Unbox the unit and attach leg extensions if desired.
- 2. Un-package the 4 finger grates and place in designated slots on top of unit.



SET-UP INSTRUCTIONS

- 1. Place Big 60 on a level area clear of any combustible materials. THIS UNIT IS BUILT FOR OUTDOOR USE ONLY and should be operated in a well ventilated area.
- 2. Securely connect the regulator to the propane cylinder and test for leaks according to the instructions found on PAGE 5 & 6 of this manual.
 - A. QCC Connection: The bright green QCC connector on a regulator threads snuggly and easily onto the external threads of the propane cylinder valve by turning the QCC clockwise.
 - B. POL Connection: The POL connector on a regulator is inserted into the propane cylinder valve and screws in by turning counter clockwise using the black plastic hand wheel or wrench.
- 6. Ensure all control valves are in the OFF position.
- 7. Open cylinder valve completely and allow system to pressurize takes about 1 minute.
- 8. **TO LIGHT THE UNIT:** Hold a lit long handled butane lighter gun or fireplace match next to outer ring on burner, push in the control knob, and turn to HIGH. The burner will ignite instantly with a *POOF* sound. Remove lighter, then push and turn 2nd control knob to HIGH it will light instantly from the 1st. Repeat for center ring until whole burner is lit.



9. **TO TURN OFF UNIT:** Simply turn all of the control knobs to the OFF position, close main cylinder valve, and disconnect the propane cylinder.

The burner puts out between 2,000 BTU's (Center Ring on Low) and 60,000 BTU's (All Rings Burning on High)

OPERATING INSTRUCTIONS

- 1. Ensure all control knobs are in the OFF position.
- 2. Securely connect the regulator to the propane cylinder and test for leaks according to the instructions found on PAGE 5 & 6 of this manual.
- 3. Open cylinder valve completely and allow system to pressurize takes about 1 minute.
- 4. **TO LIGHT THE UNIT:** Hold a lit long handled butane lighter gun or fireplace match next to outer ring on burner, push in the control knob, and turn to HIGH. The burner will ignite instantly with a *POOF* sound. Remove lighter, then push and turn 2nd control knob to HIGH it will light instantly from the 1st. Repeat for center ring until whole burner is lit.
- 5. Once burners are lit, adjust the control knobs to set desired temperature.
- 6. **TO TURN OFF UNIT:** Simply turn all of the control knobs to the OFF position, close main cylinder valve, and disconnect the propane cylinder.



CLEANING & CARE

TO CLEAN:

- 1. Turn off the unit and wait approximately 10-15 minutes before attempting to clean. Finger grates will still be warm to touch so wear protective gloves if necessary.
- 2. Wipe down with hot soapy water as needed.
- 3. Store in covered area (ie: garage, shed, etc.) once cooled down completely. Cast iron burner should be protected from elements.

SPIDER & INSECT ALERT

All outdoor appliances should be inspected thoroughly for spiders and insects if unit is sitting for a period of time between uses. Propane and natural gas contain an odorant that insects and spiders are attracted to. This leads them to build webs and nests in burners and around control valves. Nests can form very quickly and are prevalent in areas with wet and humid conditions. We recommend the regular cleaning and inspection of the burner and control valves as a form of normal maintenance.

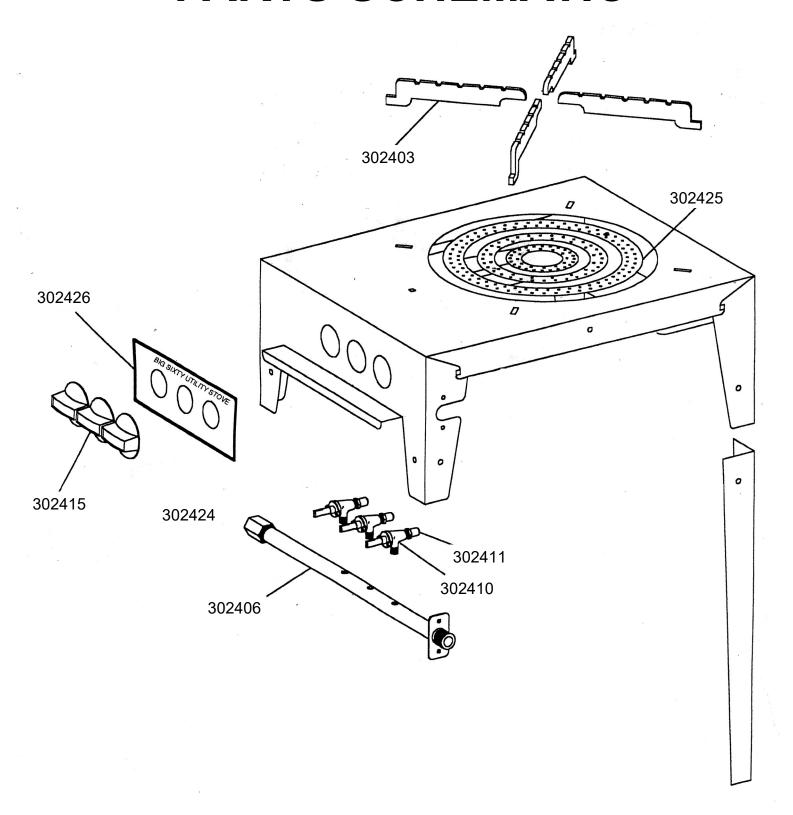
- 1. Warning Signs of a nest or web:
 - a. The smell of gas
 - b. Burner is hard to light or will not light at all
- 2. How to clean the burner tubes:
 - a. Turn off gas and completely disconnect unit from gas source. (let cool completely if previously lit)
 - b. Remove burner and visually inspect inside looking for a cotton-like substance that could be a web or nest.
 - c. If a mud-like substance is found, this is a sign of wasps and should be cleaned immediately
 - d. Use a pipe cleaner to remove any signs of web, nest, or other debris
 - e. Wipe off outside and each hole along burner to ensure nothing is clogging holes
 - f. Rinse with water if necessary
 - g. Dry burner thoroughly before replacing into unit.
 - h. Apply vegetable oil and light unit, if burner was washed with soap and water, to help prevent rusting.
- 3. How to clean the control valve orifice:
 - a. Turn off gas and completely disconnect grill from gas source.
 - b. Use small wire, needle or pipe cleaner to gently wipe away any debris from orifice.

PARTS LIST

Item #	<u>Description</u>
302110B 302110LL 302107 302102LL	Low Pressure Regulator with Brass POL (for use with 100 lb. propane tanks) Low Pressure Regulator with 200K Lime Green QCC-1 (propane tanks less than 100 lbs.) Brass POL with Black Hand Wheel Connector Only 200K Lime Green QCC-1 Connector Only
302120A 302123A 302124A 302127A	6' Low Pressure Hose 10' Low Pressure Hose 12' Low Pressure Hose 15' Low Pressure Hose
302424 302425	Stainless Steel Air Mixer 3 Ring 60,000 BTU Cast Iron Burner
302410-20K	Control Valve with Orifice for Smallest Burner Ring Control Valve with Orifice for Middle Burner Ring Control Valve with Orifice for Outer Burner Ring
302411-20K	Orifice for Smallest Burner Ring Orifice for Middle Burner Ring Orifice for Outer Burner Ring
302415	Control Knob
302403 302402 302401	Flat, Rectangular Finger Grate (Currently Used) Set Screw Finger Grate (Old Style) Squared Off Finger Grate (Old Style)
302426	Front Placard



PARTS SCHEMATIC



ACCESSORIES

Item #	<u>Description</u>
301016	30# Propane Cylinder
301017	40# Propane Cylinder
400102	20 Quart Pot Set
400104	40 Quart Pot Set
400106	60 Quart Pot Set
400108	80 Quart Pot Set

TROUBLESHOOTING GUIDE

PROBLEM(s): - Burner will not light completely.

- Burner will light, but then turn off shortly after.

- Burner will not light

TO TROUBLESHOOT THE PROBLEM

1. Check that all of the control valves are in the "CLOSED" position. CHECK:

> 2. Check that you are using at least a 30# propane tank 3. Check that the QCC is lime green - black or dark green will cause lighting problems.

If everything is correct, reset the system.

To reset: Close all of the control valves on the utility stove & close propane tank SOLUTION: valve. Then start the lighting procedure from the beginning. If the problem persists,

Check for Leaks:

If you experience a QCC Failure, first check your system for leaks:

1. Turn off all control valves and turn off propane tank

2. Extinguish any remaining open flames

3. Let gas dissipate until odor is no longer detected

4. Make sure all control valves are closed and gas tank valve is off

5. In a spray bottle, mix together dish soap and water

6. Spray the following with soapy water mixture

a. Tank Valve to QCC (part that screws into tank from regulator)

b. QCC to Regulator

c. Regulator to Hose

d. Entire hose

e. Hose to Grill

f. Each Control Valve where it Connects to Manifold

g. Manifold end cap (opposite side from hose connection)

7. Turn on propane tank

8. Inspect each connection and length of hose for any bubbles being produced

9. If bubbles are detected (bubbles indicate gas is escaping), turn off propane tank and call Big John Grills to order replacement parts. Do not go to your local hardware store.

10. If no bubbles are detected, check to see if propane tank is empty.

11. If tank is not empty, please call Big John Grills for further assistance



TROUBLESHOOTING GUIDE

PROBLEM: Frozen Regulator

CAUSE: Water in fuel or use of under-sized propane cylinder

SOLUTION: Make sure your propane tank is standing up vertically. Horizontal tanks cannot be used on Big John appliances. The two models of gas regulators that Big John has used over

the years are the Marshall Brass model 230 and now the Gas-Flo model GR-800.

Anything other than these two models of regulator is "after-market" and is not approved

by Big John Corporation.

If you are using one of the two regulators listed above, please see below for possible solutions. If you are not, please call Big John Grills to purchase a replacement regulator.

- 1. Check that you are using at least a 30 lb. propane tank as most Big John equipment requires a minimum of a 30# propane tank due to the BTU draw. Use of 20 lb. cylinders is only acceptable for an appliance with a BTU draw of 60,000 BTU's or less. The more volume of LP fuel you are drawing from, the less likely you are to experience a freeze-up. Once a freeze-up occurs you can ether switch tanks or pour warm water over the tank valve and QCC connector. Make sure the vent hole in the regulator is pointed downward so no water gets in the regulator. Freeze-ups are most likely to occur in high humidity or extremely cold situations.
- 2. If you continue to have freeze-up issues, there is a possibility that condensation in the fuel is the cause of the problem. Condensation can accumulate in the propane tank if it was not purged correctly when it was put into service. Take the tank to your professional filling station and ask them to purge the tank before re-filling.

WARRANTY INFORMATION

Big John Corporation provides a warranty, to the original purchaser, for all Big John finished units for a period of 1 year from the date of sale. Any unit, or part thereof returned, freight prepaid, to our Sales & Logistics facility, will be repaired or replaced to our commercial standard, free of charge, and returned to the purchaser. Labor and transportation costs are NOT covered by this warranty. Misuse, neglect, or alteration of the product is not covered by this warranty. This warranty is established automatically upon receipt of the goods. No warranty card or registration procedures are required.

Outgoing warranty shipments must be F.O.B. factory (Bellefonte, PA). All items requested for return must be received within 30 days of the return authorization being granted to the customer or no warranty credit will be considered.

WARNINGS

FAILURE TO FOLLOW THE DANGERS, WARNINGS, CAUTIONS, AND INSTRUCTIONS OUTLINED IN THIS MANUAL MAY RESULT IN SERIOUS BODILY INJURY OR DEATH, OR CAUSE DAMAGE TO PROPERTY BY FIRE OR EXPLOSION.

- Do not use this unit unless all parts are in place. This unit must be assembled properly according to the assembly & set-up instructions listed in this manual. Failure to do so is dangerous.
- Always check your utility stove for gas leaks and burner obstructions before use. See instructions in this manual for correct procedures.
- Do not store or use gasoline, other flammable liquids, or vapors in the vicinity of this product.
- Do not store extra liquid propane cylinders within the vicinity of this product.
- Always position the propane cylinder so that the connection between the valve and the regulator will not cause any sharp bends in the hose.
- Do not operate any equipment, including this utility stove, if there is a gas leak present.
- Do not use a flame to check for gas leaks.
- Combustible materials should never be within 12 inches of this unit in any direction.
- Do not put anything flammable in the area under the unit.
- No Big John Grills & Rotisseries equipment should used by children.
- Accessible parts of the unit may be very hot. Keep children away when in use.
- Big John equipment should never be left unattended or moved while in operation.
- You should exercise reasonable care when operating your unit and remember it will be hot during cooking and cleaning.
- Should the burner go out while in operation, turn off all gas valves and turn off gas source. Let stand for 5-10 minutes before attempting to relight using the lighting instructions found in this manual.
- Never lean over an the utility stove or place hands or fingers on top of unit or finger grates while in operation.
- Should an excessive flare-up occur, turn off the burner and propane tank and wait until fire is out.
- Clean your Big John utility stove on a regular basis.
- Keep any electrical cords or fuel supply hose away from heated surfaces at all times, especially when in use.
- Use heat-resistant barbecue gloves or mitts when operating this utility stove.

- Do not enlarge valve orifices or burner holes when cleaning.
- Do not attempt to disconnect any gas fittings while your unit is in operation.
- Do not store or lean items against grill surface or fuel cylinders while operating.
- Liquid propane is NOT natural gas. The attempted use of natural gas in a liquid propane unit or liquid propane gas in a natural gas unit is dangerous and will void your warranty. If you wish to change your unit from LP to NG or vice versa, please call a Big John Customer Service Agent to obtain required parts.
- Only use the supplied hose and regulator for this unit. Do not use one purchased from a gas company or hardware store. Natural gas connections must be made to meet your local codes.
- Do not attempt to disconnect the gas regulator or hose assembly while unit is in operation.
- Make sure the POL or QCC Connector is free from scratches or nicks which can cause gas leaks.
- Do not paint propane tanks any color other than white. Any alteration to tank color may result in tank purging, fire, personal injury, or death.
- NEVER store or use propane cylinders indoors.
- Always keep a propane cylinder in a secure, upright position while transporting or storing. Do not lay tanks on their side.
- Never keep propane cylinders (full or empty) in a hot vehicle. Heat could cause the relief valve to purge propane creating a very dangerous situation.
- Always keep the cylinder valve closed when not in use.
- Do not store a liquid propane cylinder in/on any part of the appliance not intended for such use. Improper storage of a cylinder could lead an explosion, fire, personal injury, or death.
- Propane gas is denser than air and will collect in low areas.
 Use caution when dealing with any such fuels.
- Do not use a dented or rusted liquid propane cylinder as it may be hazardous and should be checked by your propane dealer.
- Do not use a propane cylinder with a damaged valve.
- Although your propane cylinder may appear empty, there may still be gas present. The cylinder should be stored and transported accordingly.
- If you see, smell, or hear the hiss of gas escaping from the liquid propane cylinder:
 - 1. Move away from the cylinder
 - 2. Do not attempt to correct the problem yourself.
 - 3. Call your fire department.

